

LISTING OF THE CLAIMS

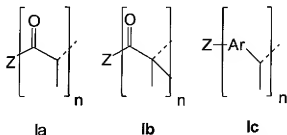
1. (currently amended) A thermoformed film composition comprising:

- from 95 to 100% by weight of at least one block copolymer corresponding to the formula $(A)_m(B)_n$ -I and

- from 0 to 5% by weight of at least one polymer A,

n being an integer greater than or equal to 2, m being an integer less than or equal to n, B being a polymer block, bonded directly to the core I via a covalent bond, polymer block B containing a mixture of monomer units (B_0) comprising at least 60% by weight of acrylic monomer units (b_1) and A being a polymer block, bonded directly to the B block via a covalent bond, containing a mixture of monomer units (A_0) comprising at least 60% by weight of methacrylic monomer units (a_1),

the core (I) being an organic group resulting from the thermal decomposition of the corresponding alkoxyamine, corresponding to one of the following formulae:



in which Ar denotes a substituted aromatic group and Z denotes a polyfunctional organic or inorganic radical with a molar mass of greater than or equal to 14, wherein polymer A and polymer block A have the same composition, wherein said composition contains no core-shell additives and no copper complexes.

2. (previously presented) The film as claimed in claim 1, characterized in that said polyfunctional organic radical is selected from the group consisting of 1,2-ethanedioxy, 1,3-propanedioxy, 1,4-butanedioxy, 1,6-hexanedioxy, 1,3,5-tris(2-ethoxy)cyanuric acid, polyaminoamine, polyethyleneamines, 1,3,5-tris(2-ethylamino)cyanuric acid, polythioxy radicals, phosphonate radicals, and polyphosphonate radicals.

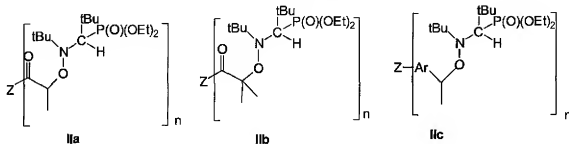
3. (original) The film as claimed in claim 1, characterized in that said polyfunctional inorganic radical is chosen from complexes of formula $M^{n+}O_n^-$ in which M is a magnesium, calcium, aluminum, titanium, zirconium, chromium, molybdenum, tungsten, manganese, iron, cobalt, nickel, palladium, platinum, copper, silver, gold, zinc or tin atom.

4. (previously presented) The film as claimed in claim 1, characterized in that said composition it is obtained according to the controlled polymerization process consisting of

- the polymerization at a temperature of between 60 and 150°C of the mixture B₀ in the presence of an alkoxyamine and of an agent for controlling the polymerization up to a degree of conversion of 90%,

- the removal of a portion or of all of the unreacted monomers B₀,
- the addition and the polymerization of the mixture A₀,
- the removal of all of the unreacted monomers and recovery of the copolymer formed.

5. (previously presented) The film as claimed in claim 4, characterized in that the alkoxyamine is chosen from the compounds corresponding to one of the following formulae:



6. (previously presented) The film as claimed in claim 4, characterized in that the control agent is chosen from the compounds corresponding to one of the following formulae:



7. (previously presented) The film as claimed in claim 1, characterized in that the mixture of monomers B₀ comprises:

- from 60 to 100% by weight of acrylic monomers (b₁) chosen from alkyl acrylates with an alkyl chain comprising at least two carbon atoms,
- from 0 to 40% by weight of monomers (b₂) chosen from monomers which can be polymerized by the radical route.

8. (previously presented) The film as claimed in claim 1, characterized in that the mixture A₀ comprises

- from 60 to 100% by weight of at least one methacrylic monomer (a₁), or any methacrylate comprising an alcohol, amide or amine functional group,
- from 0 to 40% by weight of at least one monomer chosen from anhydrides, such as maleic anhydride, vinylaromatic monomers and the monomers corresponding to (b₁).

9. (previously presented) The film as claimed in claim 1, characterized in that the monomers B₀ represent from 10 to 60% by weight of the total weight of the monomers composing the copolymer.

10. (previously presented) The film as claimed in claim 1, characterized in that the B block represents from 10 to 50% by weight of the copolymer.

11. (previously presented) The film as claimed in claim 1, characterized in that the B block exhibits a T_g of less than 0°C.

12. (previously presented) The film as claimed in claim 1, characterized in that it exhibits elastomeric domains B with an average size of less than 50 nm.

13. (previously presented) The film as claimed in claim 1, characterized in that it exhibits a thickness of between 50 and 200 microns.

14. (previously presented) The film as claimed in claim 1, having a modulus of elasticity of

between 300 and 1800 MPa, a haze of less than 2 and an elongation at break of greater than 60%.

15. (previously presented) The film as claimed in claim 1, characterized in that it additionally comprises an inorganic or organic pigment.

16. (previously presented) A multi-layer composition comprising the film as claimed in claim 1, as a surface directly attached to a material selected from the group consisting of acrylonitrile-butadiene-styrene (ABS), polycarbonate (PC), poly(vinyl chloride) (PVC), polystyrene (PS), high impact polystyrene (HIPS) or polypropylene(PP).

17 – 22 (cancelled)

23. (new) The thermoformed film composition of claim 1, comprising: 100% by weight of at least one block copolymer corresponding to the formula $(A)_m-(B)_n-I$.